



California Energy Commission

Transportation Energy Demand Forecasts, 2005-2025

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Purposes

- Energy planning
- Infrastructure assessment and supply adequacy
- Projected use of hybrid and diesel vehicles
- Baseline for analysis of various policy options



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Projections

- On-road gasoline and diesel demand
- Transportation electricity and natural gas (transit)
- Commercial jet fuel
- Vehicle miles traveled by vehicle type
- Fuel efficiency by vehicle type



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Models

- Transit, Freight, Aviation, Calcars (light-duty vehicles)
- Calcars re-estimated with 2002 state survey data
- Re-estimated Calcars designed to forecast gasoline, gasoline hybrid, and diesel light-duty vehicles
- Calcars projects vehicle ownership by household type and by vehicle class, using projections of vehicle attributes



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<i>Forecast</i>	<i>Low Fuel Price</i>	<i>High Fuel Price</i>	<i>Extra High Fuel Price</i>
Base Case	Case 1	Case 2	Case 3
Higher Fuel Efficiency	Case 4	Case 5	Case 6

- Forecasts based on 2005 IEPR demographic/economic data
- Base case fuel efficiency for new vehicles consistent with CARB greenhouse gas light-duty vehicle regulations



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Issues

- Comparison of projected demand under various fuel price scenarios with projected in-state supply to gauge import requirements
- Projected use of gasoline hybrid and light-duty diesel vehicles under various fuel price scenarios



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Issues (cont.)

- Impact of increased light-duty truck fuel economy standards
- “Natural” increase in vehicle fuel economy (or lack thereof)
- Trends in purchase behavior: SUV’s, cross-utility vehicles, “mega” vehicles
- New buses: natural gas vs. diesel
- Other issues?